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# TRADE AND ECONOMIC POLICY COMMENTARY No. 24



*Canadian Trade in Services:*

*A Snapshot*

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## CANADIAN TRADE IN SERVICES: A SNAPSHOT

### INTRODUCTION

This paper<sup>1</sup> attempts to provide some insights into understanding the dynamics of trade in services in an increasingly globalized and open world economy, particularly in respect to Canada. The main objective of this study<sup>2</sup> is to provide a statistical review of trade in services for Canada, and in some cases the other G-7 countries, in order to provide a basis for understanding and approaching future negotiations in trade in services.

Services are important to the economy and to trade. In Canada, services represented 73% of employment and 67% of GDP in 1997. The share of services in total Canadian trade was about 15% during the 1987-1997 period. Globally, trade in services represented about 19% of total world trade in 1997. Services, however, also play an indirect role in trade, as domestic service inputs are important for the production of goods destined for export. Thus, services play a more important role in countries' international transactions, than indicated simply by trade in services statistics.

With a new WTO multilateral set of negotiations on services<sup>3</sup> soon upon us, Canada, and the WTO Members more generally, need to consider the characteristics of services and trade in services. The growing importance and leading role of services in the Canadian economy, in conjunction with the upcoming WTO negotiations, raises several key questions: i) To what extent do services account for Canadian domestic economic activities? ii) Does the pattern of domestic activities translate into a similar pattern with respect to Canadian trade in services? and iii) How do Canadian services trends compare to other industrialized countries?

This paper is divided into three parts. Section 1 provides a short introduction to the service sector, it presents empirical findings of domestic indicators for Canada and the other G-7 countries. Section 2 provides trade trends of services industries on a global and Canadian basis over the past ten years. Section 3 summarizes the main findings of the study and identifies some key service issues that need to be considered in preparation for the next WTO negotiations in services.

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<sup>1</sup> This paper constitutes a condensed version of a more comprehensive study entitled *An Overview: Understanding the Canadian Service Sector and Trade in Services* will be available on DFAIT's website. The longer paper also includes a review of literature.

<sup>2</sup> It is important to note that the results of this study, as well as any findings on services overall, should be used with great caution due to limitations in service data. On the trade side, the data do not extend to sales by affiliates abroad.

<sup>3</sup> Aside from the trade liberalizing features of this agreement, the General Agreement on Trade in Services (GATS) requires that Members enter into successive rounds of negotiations to further liberalize trade in services. The first of these rounds is to begin no later than in the year 2000.



## THE SERVICE SECTOR

It is generally acknowledged that services can be as diversified as goods, and can be labour intensive (domestic works) or capital intensive (communications), perishable (cleaning) or durable (education), simultaneous (live concert) or decoupled (computer-aided instruction).<sup>4</sup> Services have also become more diversified as the spread of information technology (IT) through the service sector has encouraged a blurring of the distinction between services and manufacturing.<sup>5</sup> Services are becoming more storable, like goods, due to the codification of knowledge used by IT. Services are also becoming more capital intensive as IT equipment has and will likely continue to be sold mainly to service producers.<sup>6</sup> In the past, many people believed that services were labour intensive and unproductive. This view is now fading.

Services have always represented a large share in domestic production, either on the production side such as transportation and communication, or for final consumption such as dry cleaning, theatre, etc. The recent interest for services in general originated from the emergence of a new phenomenon in industrialized countries. This phenomenon is referred to as a “structural shift” and is characterized by a gradual shift in employment and output from the manufacturing to the service sector. Several factors might have contributed to this shift in employment and output; including a growing mutual interdependency between the service and the goods sectors.<sup>7</sup> This section will describe how services have influenced employment and production.

### Employment

A pervasive theme in the services literature has been the impact of growth of services on employment. Employment in services covers a large range of work with vastly different skills. Services provided to producers tend to produce more growth and employment opportunities for the whole economy than those provided directly to consumers. In addition, the emergence of new products, characterized by a high information content, and technologies has given rise to a new set of jobs which in turn will create their own demand for other types of jobs and products.<sup>8</sup>

Since 1970, the share of employment in services has increased steadily in most OECD countries, varying between 50% and 70%. This has been reflected by the 40% growth in services in total OECD employment between 1980 and 1995. However, due to the last recession, Canada and the US saw their average annual growth rate of

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<sup>4</sup> Riddle, Dorothy I. *Service-Led Growth. The Role of the Service Sector in World Development*. Westport: Praeger Publishers, 1986

<sup>5</sup> Wickoff, Andrew, “The Growth Strength of Services”, OECD Observer, no 200, June 1996.

<sup>6</sup> According to Wickoff, four-fifths of the IT sold in the US is now purchased by services providers.

<sup>7</sup> Economic Council of Canada. *Employment in the Service Economy*. Ottawa: Canada Communication Group, 1991.

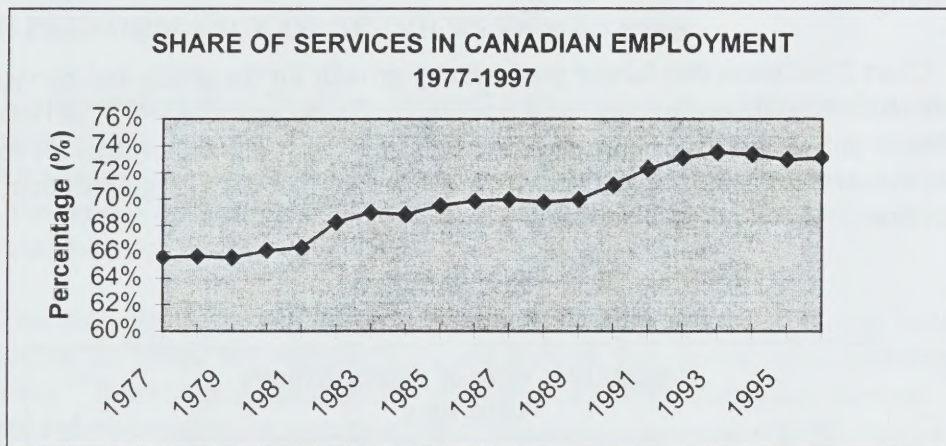
<sup>8</sup> McKenzie R.B. “The Emergence of The Service Economy: Fact or Artifact?” in Grubel Herbert G. ed. *Conceptual Issues in Service Sector Research: A Symposium. The Economics of the Service Sector in Canada Series*. Vancouver: The Fraser Institute, p.75



manufacturing and services employment decline from 2.5% and 2.8% during 1985-1990 to 1.8% and 1% respectively, during 1990-1995.

Nevertheless, services have dominated employment in Canada for many decades, and this has been a general shift in employment from the goods to the service sector.<sup>9</sup> Chart 1 shows that the share of services reached 73% in 1997 compared to 66% in 1977. The growth in services employment in Canada occurred mainly in the business and personal services as well as in the community, business and personal services.

**CHART 1**



Source: Statistics Canada matrix # 72-201

## Output<sup>10</sup>

The interaction between manufacturing and services plays a very important role in the dynamics of an economy. A significant part of the service sector growth derives from growth in the level of activity of resources and manufacturing in Canada.<sup>11</sup>

In 1993, the share of services in GDP in the G-7 countries was about 62%. Canada ranked second, just behind the US (69%) with 66%. Overall, between 1987 and 1997, services producing industries in Canada grew by 2.3% on an average annual basis compared to 1.8% for goods. Services reached a peak in terms of its importance in GDP at almost 68% in 1992 and then declined to 66.5% in 1997.

Service growth during the last decade in OECD countries was mainly concentrated in the financial, insurance and business services. In Canada, the computer and related services sector grew the most on average at 16.4% annually, followed by other business services with 8.6%, and telecommunication carriers with 7.6% during the

<sup>9</sup> The goods sector share of employment decreased from 60% in 1946 to 26 % in 1996, ECC report (1991).

<sup>10</sup> Accurate measurement of services has been a burden for those attempting to assess output and productivity. The methodology used for collecting data as well as the broader problem of identifying what is being transacted are mainly responsible for the measurement problems.

<sup>11</sup> The ECC report, p. 53.



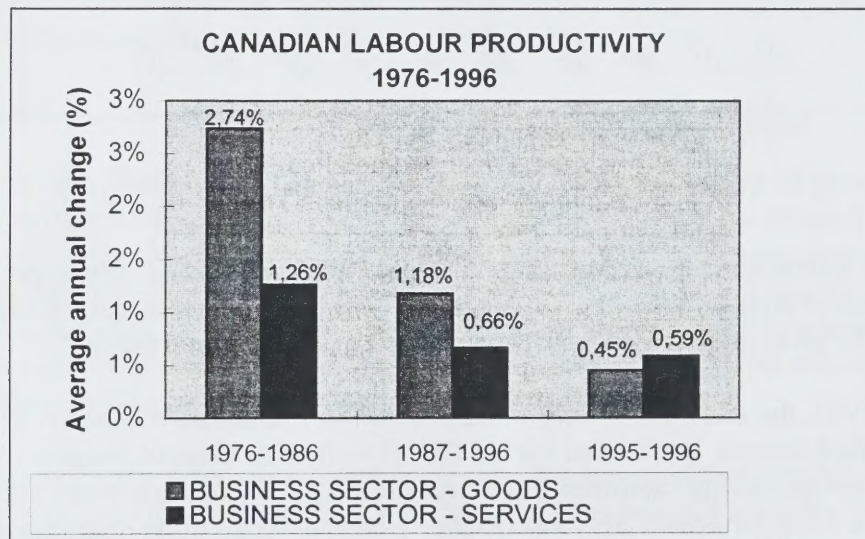
1987-1997 period. The same pattern was also seen for the 1997 annual change. The overall trend in recent years is thus one of rapid growth in business oriented services.

### Productivity<sup>12</sup>

The service sector has often been perceived, correctly, as less productive than manufacturing. Research on the Canadian economy indicates that the commercial service sector had on average a much slower growth rate of labour productivity than the goods producing sectors. However, there are some service sectors, such as communications, which showed higher productivity growth than goods.<sup>13</sup> Generally non-market services, such as public administration and social services, are characterized by lower productivity.<sup>14</sup>

Chart 2 indicates that labour productivity growth for the goods and services business sectors have declined during the periods 1976-86 and 1987-96. The decrease in productivity growth however was more important for the goods sector than for services. In 1996, the service sector has showed a higher level of productivity growth than the goods sector.

CHART 2



Source: Statistics Canada matrix # 7921

### R&D in services

R&D, technology and growth in productivity are closely linked with developments in some service sectors. Those sectors are computer services and

<sup>12</sup> Here we refer to labour productivity.

<sup>13</sup> It is also worth repeating the observation that productivity in the goods sector is influenced by the use of services inputs.

<sup>14</sup> Grubel Herbert G., Michael A. Walker. eds. *Service Industry Growth, Causes and Effects*. The Economics of the Service Sector in Canada Series. Vancouver: The Fraser Institute, 1989.



communication.<sup>15</sup> Investment in R&D is a central element of most services activities and has had a significant impact on productivity growth in these R&D intensive sectors.<sup>16</sup>

Overall, service firms performed up to 40% of all R&D in the OECD, with the highest level in Canada and the US. Between 1991-1995, Canada's average annual growth in gross domestic expenditures on R&D (GERD) was 3.7% which was the highest among G-7 countries. Between 1986-96, the GERD has been a stable share of GDP in Canada with an average of 1.6%. In 1996, 62% of the GERD was performed by the business sector (both goods and services) of which 33% was performed by services industries.<sup>17</sup>

## TRADE PERFORMANCE OF SERVICES INDUSTRIES

Understanding what "trade in services" means is not straightforward. A criterion to determine if trade has occurred is whether or not a service product is exchanged between residents and nonresidents.<sup>18</sup> There are four ways to trade services: a consumer (client), the service (product), or the supplier (provider) may cross the border, or a commercial presence can be set up abroad.<sup>19</sup>

Traditionally, economic theory recognized two basic characteristics of services that supported the belief that services were less tradable than goods: non-storability and intangibility.<sup>20</sup> Both these factors have been influenced by technological changes. Producers and consumers can now more than ever exchange services products at a distance through telecommunication network.

As with the service sector in general, technology has greatly influenced the way services are traded. For example, certain services (e.g., medical services) that have

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<sup>15</sup> One of the best channels to obtain financial support for R&D activities is through trade with foreign affiliates.

<sup>16</sup> It should be noted that there are serious limitations on R&D data that can not allow for a good assessment of the role of R&D in services industries.

<sup>17</sup> Data come from "Research and development in a Service Economy", F.D. Gault, Statistics Canada Science and Technology Redesign Project and Services Division, #12 series, 1997.

<sup>18</sup> Richardson J., "A Sub-sectoral Approach to Services' Trade Theory" in Giarini Orio. ed. *The Emerging Service Economy*. Geneva: Services World Forum, 1987, p.61.

<sup>19</sup> Services transactions are often presented in four categories: travel, transportation, government services and other services (business services). The breakdowns are based upon the IMF Fifth Manual of Balance-of-Payments which serves as a reference for classifying services transactions by national statistical agencies such as Statistics Canada. The WTO GATS defines four modes of delivery for services that are embodied in the IMF definitions but actual coverage of IMF data is limited to cross-border flows by definition. The IMF statistics for balance of payment exclude the mode three transactions of non resident subsidiaries with non-residents. The OECD and the WTO use the IMF methodology to produce their annual statistical reports. In this section, we will use mainly statistics derived from the WTO Annual Report which are based on the IMF classification for the period of 1986-1996.

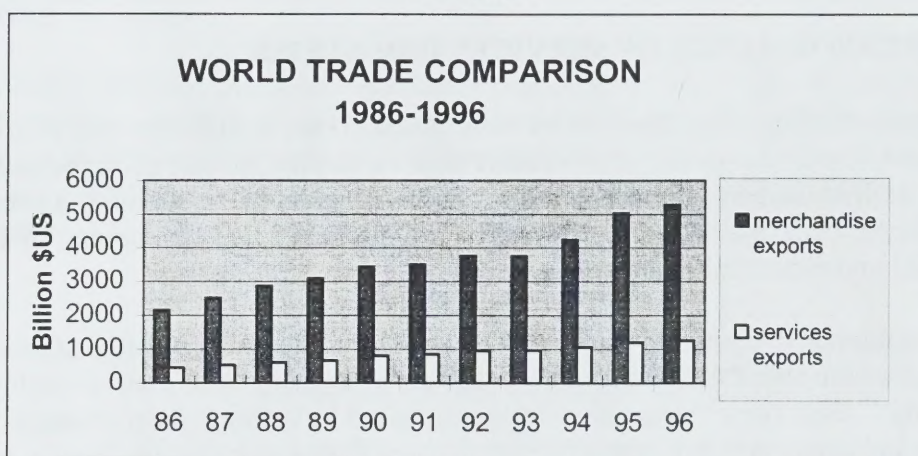
<sup>20</sup> Non-storability implies that services have to be consumed and produced at the same location and at the same point in time. Intangibility implies a closer interaction between the producer and the consumer is most of the time necessary. Sapir A., Comments in Giarini, Orio. ed. *The Emerging Service Economy*. Geneva: Services World Forum, 1987.



traditionally been considered non-tradable can now be exchanged electronically. In that regard, it has been observed that where personal contact between buyer and seller is required, the cost of mobility limits tradability.<sup>21</sup>

This section provides a review of trends in international trade in services from 1986 to 1996. As Chart 3 illustrates, world trade in services<sup>22</sup> has risen substantially from 1986-1996, but is still small relative to trade in goods. In 1986, world exports of services were about 400 billion US dollar, compared to 1.27 trillion in 1996.<sup>23</sup> For goods, exports represented around 2.2 trillion in 1986, and were 5.3 trillion respectively in 1996.

**CHART 3**



Source: WTO Annual report 1997

From 1986 to 1996, the share of world trade in services (exports and imports) in total world trade increased by 2 percent from 17% in 1986 to 19% in 1996. It is important to recognize, however, that this result underestimates trade in services statistics where services inputs embodied in traded goods are not accounted for in the services statistics. The average annual growth of services exports exceeded the growth of trade in goods by 2%, i.e., 9.6% and 11.6% respectively between 1986-1996. In 1996, services exports grew at 5%, slightly more rapidly than merchandise trade at 4.7%.<sup>24</sup> The share of services trade in world GDP has continuously increased from 6.3%, in 1985 to 8.7% in 1995.<sup>25</sup> Trade in services thus contributes more in terms of GDP than it did ten years ago.

<sup>21</sup> Bhagwati, J.N. "Splintering and Disembodiment of Services and Developing Nations", World Economy, 7:2, 1984.

<sup>22</sup> For the purpose of this sub-section on world trade, the term "services" will be used instead of "commercial services" used by the WTO. It includes "all services except government", and "commercial services" refer to those services other than travel, transportation and government.

<sup>23</sup> WTO 1996 data are still provisional, i.e., all trade figures are not compiled yet. However, data for most developed countries have been collected and reflected here.

<sup>24</sup> Exports and imports of services, and world trade in general, experienced a significant 9 % and 10% drop from 1995. This can be partly explained by the rapid appreciation of the US dollar and price changes.

<sup>25</sup> EET's calculation. Source: WTO and World Development Bank.



Trade in services with foreign affiliates is at the heart of many policy discussions. In the early 1990s, about 50% of the global stocks of FDI were in service activities.<sup>26</sup> Trade with foreign affiliates is important for services industries because it constitutes an important means by which they can participate in foreign markets, especially when a presence is required to implement commercial activities. For example, since 1993, there have been generally more arms'length transactions by Canada with its trading partners, i.e., more exports and imports are being traded with non-affiliated enterprises, except for exports with the US. Foreign-controlled companies traded more commercial services through their affiliated companies than the Canadian-controlled companies. Canadian controlled companies dominated exports with 67.7% compared to 44.7% for imports in 1996. Out of the 67.7% of exports, about a quarter of such exports was conducted through Canadian affiliates.

Services trade, as with trade in goods, continues to be dominated by developed countries, mainly by the G-7 countries. Between 1985 and 1996, the largest exporters remained the US representing 16.2 per cent of world service exports in 1996, followed by France, Germany and the UK. For importers, the US, Germany and Japan dominated during the same period. In 1996, the top six leading exporters and importers represented more than 50 per cent of the total value of world trade in services. Canada's global position remained relatively constant throughout the period for both exports and imports ranking 15th and 9th respectively in 1996. Canada's share of both imports and exports decreased gradually between 1985 and 1996.

Although the G-7 countries dominate the ranking of the largest services traders, other countries have shown remarkable increases in services trade since 1986. On the export side, Thailand, Malaysia and China showed the highest average annual change between 1986-1996. On the import side, China, Thailand and Korea had the highest average growth during that same period.

Recent years have seen a pronounced emergence of commercial services (e.g., banking, communication, etc.). Between 1990 and 1996, the share of exports of commercial services in total trade in services increased by about 2.6 percent, to reach \$530 billion in 1996. Global exports of commercial services grew more rapidly than any other sector in 1996, i.e., by 7 percent, and represented the most traded services in value terms. The transportation sector experienced the least growth during that same year. In 1995, the US held the largest share of world exports of services in all three categories (commercial services, transportation and travel) as well as in transportation imports whereas Germany led as largest importer in commercial services and more recently in travel.

Canada's share of global services exports was 1.8% while its share of imports was 2.5% in 1996. Trends in trade in services in 1992 constant dollar terms<sup>27</sup> (Chart 4) show

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<sup>26</sup> UNCTAD and World Bank. *Liberalizing International Transactions in Services: A Handbook*. Geneva: United Nations, 1994.

<sup>27</sup> The price index used to deflate current dollars services statistics comprises non-merchandise prices including investment income. This index is the best deflator available to date for services.



that a trade deficit started to grow progressively at the end of the eighties, reaching a peak in 1991, before decreasing in the period following the recession. This can be explained by a higher growth of imports before 1991, and by a higher growth of exports after 1991. In 1997, Canada's real services trade deficit reached a low of 4.3 billion. Exports and imports of services in constant prices represented 38 billion and 42 billion in 1997.<sup>28</sup>

CHART 4



Source: Statistics Canada catalogue # 13-001

Canadian services exports in GDP terms represented 4.9% while services imports in GDP terms represented 5.2% in 1997. Services exports represented 12.1% of total Canadian exports whereas imports represented 15.4% for that same year. It is important to note that the shares of services exports and imports were higher thirty years ago, meaning that services trade in 1997 is not relatively more important in terms of total Canadian trade.<sup>29</sup> However, the composition of services is significantly different.

Overall, for all service sectors in Canada, the annual growth in 1997 was dominated by sectors from commercial services. Exports of non-financial commissions grew by 25%, followed by "other financial services" with 19.5%. On the import side, construction services led with 46.2%,<sup>30</sup> followed by computer and information services with 17.5%.<sup>31</sup> For commercial services, exports and imports totaled \$20.1 and \$22.6 billion in current terms. Between 1992 and 1997, exports of commercial services grew by 12.8% and imports grew by 9.5%. Exports of royalties and license fees rose the most, showing an average growth of 22.5 % a year followed by architectural and engineering

<sup>28</sup> In current prices, exports and imports represented \$41.6 and \$50.3 billion in 1997.

<sup>29</sup> Pending the availability and quality of data collected.

<sup>30</sup> Construction services data are subject to the size of construction contracts. Hence, it may lead to large annual fluctuations in the results.

<sup>31</sup> Given the nature of their activities, sectors such as management, computer, legal services and others contribute in a substantial matter to the production of goods and services. These services, when used as inputs, do not appear in services statistics. The efficiency of these service sectors influences the trade performance of goods.



services. On the import side, the growth in construction soared during that same period to reach an average of 46.4% a year. The second greatest increase was in advertising and related services, recording an increase of 15%.

From 1987 to 1997, the share of services (exports and imports) shifted from the US to “other” countries by 2 percent from 61% and 59%. In 1997, Canada had the largest annual growth of exports with the US and the largest growth of imports from the EU. While Canadian merchandise trade (exports and imports) with the US represents 84% of total Canadian merchandise trade, trade in services is slightly more diversified.

The US has been Canada’s main trading partner both for services and goods for many decades. Service exports as a share of total Canadian exports to the US have been about 10% since 1987. In 1997, Canada’s exports of services to the US represented \$24.4 billion, with imports at \$30.7 billion. Canada’s deficit in services was \$6.2 billion in 1997, a decrease of 22 percent from 1996. Services have become generally less important in terms of total Canadian trade with the US in the last decades. Since 1992, there has been a decrease in both the share of services in total exports to the US and imports from the US. Canada’s export growth rate to the US increased by 7% in 1997 while imports slightly decreased by 0.6%.

## CONCLUDING OBSERVATIONS

This short paper has reviewed some key issues and trends in the service sector in Canada and in other developed countries. During the last few decades, there has been a shift in employment and output in the developed countries from the manufacturing and resources sectors to the service sector. Developments in communication and information technologies have revolutionized the organizational structure of businesses and the mean by which some services could be traded without requiring the simultaneous presence of the producer and consumer.

Service industries tend to generate spillover effects on the economy as they create a need for high-skilled labour force, a continuing development in information technologies and R&D, a low-cost and efficient transportation system, and modern telecommunication networks. These factors have a considerable bearing on a country’s ability to increase its overall level of competitiveness.

Our empirical results have shown that Canada’s economy, like those of most OECD countries, has performed well in terms of its share of services in total employment and GDP. Canadian service industries, as well as those in other developed countries, are mainly concentrated in the growing sector of commercial services. With respect to trade, Canada was the 15<sup>th</sup> largest exporter of services and the 9<sup>th</sup> largest importer of services in 1996. The share of services represented 14% of total Canadian trade in 1997. Canada’s trade in services has been largely dominated by developed countries, in particular by the US. On a sectoral basis, commercial services, in particular insurance services, contributed to the reduction in the services deficit during the last two years in Canada.



In respect to the upcoming WTO negotiations on services, this paper provides a context for undertaking further analytical work. In particular the following issues are relevant:

- The cost structure of service providers and their overall competitiveness are influenced by a variety of factors, including the pace of domestic regulatory reforms as well as the reduction in the number of services monopolies. A reduction in these impediments would improve the efficiency of the service sector;
- Trade in goods also influences services. Trade facilitation initiatives that result in an increase in the output of goods, will also influence the demand for services;
- Policies that impede the free movements of factors like capital and labour could have a considerable impact on our ability to produce more efficiently in Canada and on our overall competitiveness in trade in services;
- Sales through foreign affiliates are important. Since a large share of world services transactions are conducted through foreign affiliates, the choice of policies affecting these sales and foreign direct investment are important;
- Policy makers have tended to view the different WTO agreements in a rather distinct manner, except for general principles. However, as pointed out above, the impact of liberalization commitments undertaken for certain goods, e.g., the recent Information Technology Agreement (ITA), may have a significant impact on the development of some services products. Alternatively, a decision taken not to liberalize in one sector could have a negative effect on service activities<sup>32</sup>;
- Although the potential WTO agreements could be negotiated separately, it would be prudent to recognize the mutual interdependencies of the policies influencing both the service and goods sectors, not only in respect to trade but also in respect to investment.

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<sup>32</sup> For instance, agreements in the transportation industries could lead to decreased global transportation costs, thereby fuelling growth in trade (transportation cost significantly affect trade of most goods and services).







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